ON THE OCCURRENCE IN ENGLAND OF HELICELLA NEGLECTA (DRAP.).

By A. S. Kennard, F.G.S., and B. B. Woodward, F.L.S., etc. With notes on the Anatomy by Dr. A. E. Boycott, F.R.S., and on the Radula by the Rev. E. W. Bowell, M.A.

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In September, 1915, several examples were found by one of us (A. S. K.) on a grassy bank near Luddesdown, West Kent, of a Helicella which was obviously new to our fauna. In the same month this year two excursions were made to the locality. On the first occasion about six living examples and several dead shells were met with, but on 17th September about thirty examples were collected, whilst a number of immature specimens were left. On comparing our shells with the large series of this genus in the Norman Collection in the British Museum (Natural History) we were able to identify them as Helicella neglecta (Drap.), and this has been confirmed by Mr. G. K. Gude. Luddesdown is a small village about one mile south of Cobham, and is situated on the Chalk. The bank where the species occurs is about three-quarters of a mile south-west of Luddesdown church. It is a grassy bank about six feet high, and is really a large gap in the roadside hedge. It is a very remote spot, and we can offer no solution as to how the species came to be established there. Search was made in the neighbourhood to see if it occurred elsewhere, but so far it appears to be restricted to this one locality. We, however, hope next year to make a more extended search in the neighbourhood, for it is extremely probable that this is not an isolated colony. The district is not only a remote one, sparsely populated, but it is also famous for the number of its botanical rarities. Helicella neglecta has been well figured by Draparnaud (Hist. Nat. Moll. France, pl. vi, fig. [125] 13), by Moquin-Tandon (Hist. Nat. Moll. France, pl. xviii, figs. 27-9), and by Bourguignat (Moll. Algiers, pl. xxx, figs. 12-18).

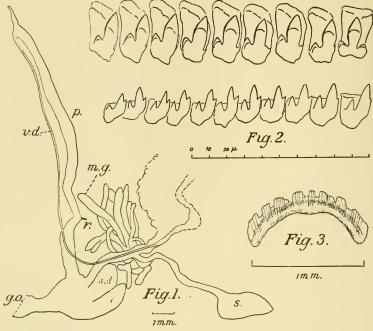
According to Westerlund it lives in Southern France, Italy, Spain, Greece, and Algiers, whilst Moquin-Tandon records it from Central and Sonthern France. The occurrence of this species in West Kent thus affords an interesting analogy with the presence of *Helicella elegans* (Gmel.) near Dover. In its habits it appears to resemble *H. gigaxii*, Pfr., for nearly all the examples were high up on the stems of grasses. In captivity it partakes freely of lettuce and carrot, but is decidedly a shy species, retiring into its shell on slight

provocation.

ANATOMY.

The obvious anatomical distinction of Mr. Kennard's specimens from any known British Helicella is the presence of a double dart-sac lying on one side of the oviduet with a single dart, itala having two sacs one on each side with two darts, virgata, gigaxii, and caperata a single sac. Apart from this the anatomy is similar to that of itala in its general features. The dart is of a simple slightly curved

accountrype. The second sac has slighter walls, and recalls the accessory dartless sacs of *Hygromia rufescens*, fusca, and (from Moquin-Tandon's account) Helicella carascalensis.



Helicella neglecta (Drap.).—Fig. 1. Genitalia of specimen whose shell measured 10.5 mm. in diameter: a.d. accessory dart-sac; d. dart-sac; g.o. genital orifice; m.g. mucous glands; p. penis; r. retractor muscles; s. spermatheca; v.d. vas deferens. Fig. 2. Unci of Radula. Fig. 3. Maxilla.

RADULA AND MAXILLA.

The radula is 2.47 mm. long and 0.96 mm. wide. There are ninety-four rows of unci. The admedians merge gradually into the externals. Ten typical admedians may be recognized, leaving twenty externals; of the latter, the lateral ten or twelve have a well-marked median cone. This is the condition which I have elsewhere described as "bifid mesocone", but in this case the accessory cone has more the appearance of an appendage median to the mesocone. In my figure of *H. caperata* (Proc. Malac. Soc., viii, p. 384) this feature is more regularly represented than I have since found to be usual; it is quite common to find an irregularly scolloped median margin to the mesocone in that species. The general appearance of the unci is shown in Fig. 2.

The maxilla is narrow, presenting no central increase of length. It is provided with eight or nine ribs. Its width is about 1 mm. (Fig. 3.)